

Description of related art

During the last years the Internet has been the fastest growing media for communication and this expansion is expected to continue. One of the most common means to finance content and services in the Internet is by selling advertising space. In traditional media, advertising has been one of the primary sources of revenues and effort has always been focused on [maximising] maximizing the results from advertising.

Internet is not different when it comes to [optimising] optimizing advertising campaigns. The goal for any party serving advertisement on the Internet is to be able to expose the correct advertisement to the Internet user in question. The problem with this is that it is relatively simple to be anonymous on the Internet and therefore it is normally only possible to prepare targeting of advertisement based on estimates given an Internet users previous visits on web-sites controlled by the advertisement serving party.

Page 2 line 7, replace "subsidise" with "subsidize"

Marked-up paragraph(s):

If it was possible to easily and safely identify an Internet user without the need for cookies or log-in procedures, a whole range of new possibilities should appear, such as the possibility to [subsidise] subsidize and/or charge activities or time spent on a specific web-site, the possibility to charge micro-amounts, or handling log-in without the Internet user being involved etc.

Page 2 line 24 and line 27, delete "a to"

Marked-up paragraph(s):

According to the present invention there is provided in a first aspect a system operable to identify and access information about a user of a distributed communication system in real time without the users intervention.

The system comprises at least one service device (108) operable to provide services to said user, and at least one access device operable to provide access to said distributed communication system. The system also comprises at least one control means connected to said at least one access device and to said at least one service device. The system also comprises [a to] said at least one access device connected identification device operable to identify an address of a specific user, and at least one storage device connected to said at least one control means. The system also comprises [a to] said at least one control means connected cache means operable to store mappings of said addresses and identifications of said users. The service device sends a request for information about a user requesting a service from said service device to said control means, which control means checks if said cache means contains an up to date identification. If said check gives an affirmative answer said control means fetches said information from said storage device and sends a reply comprising said information to said service device. On the other hand, if said check gives a negative answer said control means sends a request ...

On page 3, delete passage from lines 14-31

Marked-up paragraph(s):

Another object of the invention is to provide a method for identifying and accessing information about a user of a distributed communication system in real time without the users intervention. the method is performed with the aid of a system comprising at least one service device operable to provide services to said user, and at least one access device operable to provide access to said distributed communication system. The method comprises the following steps:

- that a user requests a service, implicitly or explicitly from a service device;
- that said service device sends a request for information about said user to a control means;

- said control means checks if a cache means connected to said control means contains an up to date identification;

- if said check gives an affirmative answer said control means fetches said information from a to said control means connected storage device, and sends a reply comprising said information to said service device; and

- if said check gives a negative answer said control means sends a request for a real time identification of an address of said user to said access device;

- said access device identifies said address with the aid of a to said access device connected identification device, and sends said identification to said control means;

- said control means fetches said information from a to said control means connected storage device, and sends a reply comprising said information to said service device. The main advantage with the method according to the present invention is that it becomes easy and safe to identify a user without the need for cookies or log-in procedures.]

Replace deleted text from Page 3, lines 14-31 and replace with the following:

- requesting a service by a user (109) from a service device (108);
- sending a request by said service device (108) for additional information about said user (109) to a control means (101; 103);
- checking, by said control means (101, 103), if a cache means (111) connected to said control means (101; 103) contains an up to date identification; whereby
- if said check gives an affirmative answer, said control means (101; 103) fetches said information from said control means (101; 103) connected to a storage device (102; 104) and sends a reply comprising said information to said service device (108); or
- if said check gives a negative answer, said control means (101, 103) sends a request for a real time identification of an address of said user (109) to said

access device (105a):

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- identifying said address, by said access device (105a) with the aid of a connected identification device (113), wherein said access device sends said identification to said control means (101; 103); and
- fetching said information from said storage device (102; 104), and sending a reply comprising said information to said service device. The main advantage with the method according to the present invention is that it becomes easy and safe to identify a user without the need for cookies or log-in procedures.

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Page 5 line 12, delete "resent" and replace with "present"

Marked-up paragraph(s):

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In figure 1 there is disclosed a block diagram of a system operable to identify and access information about a user of a distributed communication system according to the present invention. The distributed communication system can e.g. be the Internet, the Internet 2 or a digital TV-system, and comprises according to figure 1 three service devices 108 operable to provide services to different users, here disclosed at 109, in the form of three different users 109. The distributed communication system also comprises three access devices 105a, each operable to provide access to said distributed communication system. The system according to the present invention, limited by said broken line, comprises at least one control means 101; 103, here only one is disclosed, connected to said three access devices 105a and to said three service devices 108. The system according to the [resent] present invention also comprises at least one storage device 102; 104, here only one is disclosed, connected to said at least one control means 101; 103. The distributed communication system can also comprise at least one attach means 107a, here three are disclosed, each operable to attach additional information to identifications. If said distributed communication system is the Internet, said service device 108 is an online service provider, said access device 105a is an

Internet access provider (IAP) 105a, and said attach means 107a is an additional supplier 107a. A service provider is in this context any party providing an Internet based service. Said control means 101; 103 is in this context a server 101; 103.

Page 7 line 7, delete "data base" and replace with "database"

Marked-up paragraph:

(Top of page 7)

user 109. Said identification device 113 is connected to said access device 105a. Said identification device 113 is a device that finds a mapping between an address and an identifier for the user 109 currently using said address. This information may be extracted from a storage device connected to said access provider 105a, which the access provider 105a always updates with information on which address said access provider 105a assigns to said user 109. This storage device can e.g. be a database [data base]. In connection with figure 4 there is described the function of the system disclosed in figure 3.

Page 8 line 3, delete "se" and replace with "see", and

page 8 line 8, delete "optimise" and replace with "optimize"

Marked-up paragraph(s):

102, 104, and sends a reply comprising said information to said service device 108. The method is completed at block 216.

The request B, [se] see figure 3, contains the current IP-address assigned to the Internet user 109. The request B is forwarded by said first interface unit 110 to a request C1. The first interface unit 110 decides which server 101; 103 to send the request C1 to based on the geographical location of said server 101; 103 and the geographic location of said access means 105a said Internet user 109 is connected to. Said first interface unit 110 also decides whether to

[optimise] optimize this selection based on speed or reliability depending on the type of the request. The sec and interface unit 112 selects the correct access means 105a based on the IPaddress in the request C1 and forwards the request EI, still containing the IPaddress assigned to the Internet user 109, to the access means 105a. The access means 105a identifies the IP-address in request EI by the use of said identification device 113, and sends an identification back to said server 101; 103. This is illustrated in figure 3 with H1 and I. Said server 101; 103 updates said cache means 111 with the mapping between the IP-address in request C1 and the identification delivered from the access means 105a. The server 101; 103 fetches information connected to the identification delivered from said access means 105a from said storage device 102; 104, and sends a reply to said service device 108. This is illustrated in figure 3 with L1 and M. The server 101; 103 finally logs the request.

Page 13 lines 9-10, replace "actin" with "action", and

Page 13 after last paragraph add "What is claimed is"

Marked-up paragraph(s):

(Top of page 13)

physical Internet users to maintain their eVidual profiles permits the QualityAds Network to relay user defined data to online service providers 108 on demand.

On usage of this is that online service providers 108 will be able to personalize content and appearance to suit Internet users 109 based on individual preferences. Another possible use is to provide automated log-in-procedures to services provided by online service providers 108.

Not described in the drawings is the possibility for online service providers 108 to let Internet users 109 interact with servers (101 or 103). This interaction can be used to provide a possibility for an Internet user 109 to give feedback to an [actin] action taken by the online service provider given the result m or a request B to server (101 or 103). The feedback from an Internet user 109 is

stored in storage (102 or 104) in order to improve the quality of future requests B to server (101 or 103). The feedback can be handled in real time. In this scenario the Internet user 109 acts as an information supplier 107.

In figure 8 there is disclosed a schematic diagram of some computer program products according to the present invention. There is disclosed n different digital computer 100₁, ..., 100_n, wherein n is an integer. There is also disclosed n different computer program products 102₁, ..., 102_n, here showed in the form of compact discs. The different computer program products 102₁, ..., 102_n are directly loadable into the internal memory of the different digital computers 100₁, ..., 100_n. Each computer program product 102₁, ..., 102_n, comprises software code portions for performing some or all the steps of figure 4 when the product(s) 102₁, ..., 102_n is/are run on said computer(s) 100₁, ..., 100_n. Said computer program products 102₁, ..., 102_n, can e.g. be in the form of floppy disks, RAM disks, magnetic tapes, opto magnetic disks or any other suitable products.

The invention is not limited to the embodiments described in the foregoing. It will be obvious that many different modifications are possible within the scope of the following claims.

What is claimed is

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